# On Gödel and Miles Mathis

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## **Abstract**

Miles Mathis has shown the following equivalent propositions to Gödel's incompleteness theorems: [ http://milesmathis.com/godel.html ]

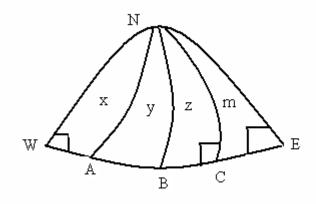
*Theorem 1*: In any logical system one can construct statements that are neither true nor false (mathematical variations of the liar's paradox).

*Theorem 2*: Therefore no consistent system can be used to prove its own consistency. No proof can be proof of itself. In this work, we attempt to prove the first theorem mention above.

Key words: Gödel's incompleteness theorems; Miles Mathis's proposition

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#### Construction



Spherical Figure 1

Let N be the north pole of a sphere and WE is its equator. AN,BN,CN.EN and WN are perpendiculars (great circle) to WE. x , y , z and m respectively denote the sum of the interior angles of spherical triangles NWA , NAB , NBC and NCE.

### Results

Since angles WAB, ABC, and BCE are straight angles they are all each equal to 180 degree.

Let angle WNB = 
$$s$$
, ANC =  $t$  and WBE =  $u$  (2)

Assuming (1) and (2) and adding we get that,

$$x + y = 2v + s \tag{3}$$

$$y + z = 2v + t \tag{4}$$

$$z + m = 2v + u \tag{5}$$

$$(3) - (4)$$
 gives,  $x + t = z + s$  (6)

$$(4) - (5)$$
 yields,  $y + u = m + t$  (7)

Squaring (6), 
$$x^2 + t^2 + 2xt = s^2 + z^2 + 2sz$$
 (6a)

Squaring (7), 
$$m^2 + t^2 + 2mt = y^2 + u^2 + 2yu$$
 (7a)

$$(6a) - (7a)$$
 gives,  $x^2 - m^2 + 2xt = s^2 + z^2 + 2sz - y^2 - u^2 - 2yu$ 

i. 
$$e(x+s)(x-s)+(u+m)(u-m)+(y+z)(y-z)+2t(x-m)$$

$$+2yu-2sz=0$$

Applying (3), (4) and (5) in the above relation,

$$(x+s)(2v-y)+(u+m)(z-2v)+(2v+t)(y-z)+2t(x-m)$$

$$+2vu-2sz=0$$

i.e 
$$2v(x+s-u-m+y-z)+t(2x-2m+y-z)+v(2u-x-s)$$

$$+z(u+m-2s) = 0$$

Using (3) and (4) in the first and second factors we get,

$$4v(s-u)+t(x-m+s-u)+y(2u-x-s) + z(u+m-2s) = 0$$
i.e (s-u)(4v+t)+t(x-m)+(y+z)(u-s)+y(u-x)
+z(m-s) = 0
i.e (s-u)(2v+y+z)+t(x-m)+(y+z)(u-s)+y(u-x)
+z(m-s) = 0 [By using (4)]
Rearranging, (y+z)(s-u+u-s)+2v(s-u)+y(u-x)
+z(m-s) = 0
i.es(2v-z)+u(y-2v)-xy+mz = 0
Putting (5) in the first factor, s(m-u)+u(y-2v)-xy+mz = 0
i.e u(y-2v-s)-xy+m(z+s) = 0
Applying (3) in the first factor, -xu-xy+m(z+s) = 0
i.e-x(y+u)+m(z+s)= 0
Assuming (7) in the first factor, e-x(m+t)+m(z+s)= 0
i.e m(z+s-x)-xt= 0
Putting (6) in the first factor, mt-xt=0.i.e m = x

(8)

# **Discussion**

From (8) we obtain that the sum of the interior angles of triangles ANW and CNE are equal. This establishes the fifth Euclidean postulate. And we can construct such that spherical triangles ANW and ANE are congruent. So, from this construction and from (8) it follows that the sum of the interior angles of triangles ANE is equal to the sum of the interior angles of spherical triangle

CNE. Consequently this yields that the interior angle sum of spherical triangle ANC is equal to two right angles. This also proves Euclid's fifth postulate. (9)

But Beltrami, Cayley, Klein, Poincare and others have shown that it is not possible to deduce Euclid V from Euclid I to IV. (10)

Needless to say, a brief analysis of eqns. (9) and (10) proves the following Miles Mathis's equivalent theorem to Gödel's incompleteness theorem:

In any logical system one can construct statements that are neither true nor false (mathematical variations of the liar's paradox).

This is only the beginning. More and more hidden truths are to be unlocked.

#### References

- [1] http://en.wikipedia.org/wiki/Theory of everything
- http://inrialpes.academia.edu/BrunoWoltzenlogelPaleo/Talks/8589/Goedels\_Incompleteness\_Theorem\_and\_the\_Theory of Everything in Physics
- [3] http://godel-universe.com/index.php?p=1 6 STEPHEN-HAWKING-VS-GA-DEL
- [4] http://www.sljaki.com/JakiGodel.pdf